

REMARKS

2,3. The office action states:

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-9, 11-18, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferren (US Patent 5,802,190) in view of Edgar (US Patent 5,588,063).

Regarding Claim 2, Ferren discloses a loudspeaker system, comprising: a first loudspeaker array comprising an enclosure having a width and a height and at least six acoustic drivers having radiating surfaces (Ferren discloses an embodiment with more than 6 speakers) (Figure 2; Column 5, lines 35-37), wherein drivers are positioned in the enclosure in a first substantially straight line, substantially regularly spaced so that the edges of radiating surfaces are less than two inches apart (Ferren discloses separation being 1/a inch) (Column 5, lines 37-39), and array is constructed and arranged to radiate sound in a predetermined frequency range (Ferren discloses the full frequency range being coupled) (Column 2, lines 10-13). Ferren does not disclose the drivers having a diameter less than three inches or a predetermined frequency range of at least six octaves.

It is well known in the art that the frequency response of the human ear is approximately 20Hz to 20KHz which is approximately 10 octaves. To produce the highest quality audio response to the ear, one skilled in the art would have known that the transducers should produce a frequency range output encompassing the greatest range between 20Hz to 20KHz possible. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a loudspeaker array would have a frequency range of at least six octaves in order to produce a high quality perceived sound for the listener.

Edgar also discloses a speaker (Fig. 5A) comprising at least six drivers in a linear array. Edgar further discloses an array of ten one-inch speakers may be used in a cabinet of 11 inches (Col. 6, lines 22-33) which will inherently produce spacing less than two inches apart. Edgar further discloses there are several reasons why a small speaker size is advantageous including producing better phase linearity and smoother frequency response (Col. 4, lines 21-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use speakers less than three inches in diameter to produce better phase linearity and smoother frequency response as taught by Edgar.

Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 3 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

Regarding claim 8, Ferren further discloses an electrical circuit which provides essentially the same audio signal to all of said acoustical drivers at all frequencies (Ferren discloses circuit in Figure 1 which discloses substantially the same audio signal to all of the drivers (26).

Regarding Claim 9, Ferren further discloses the diameter (i.e. width) of the speaker enclosure is six inches (Column 4, lines 6-7) and the speakers can be disposed within a height eight feet (Column 4, lines 15-18) producing a height to width ratio of  $(8 \text{ feet} * 12 \text{ inches}) / 6 \text{ inches} = 16$  which is greater than 11.

Regarding Claim 21, Ferren further discloses a plurality of first loudspeaker arrays in a room (Ferren discloses auditorium) (Column 1, line 13) having a performance area contiguous with a listening area (Figure 1), said plurality of loudspeaker arrays (arrays 10, 12, 14, and 16) located at a corresponding plurality of spaced locations in said performance area are each facing said listening area (area 18) with the associated straight line substantially vertically oriented, and a corresponding plurality of electroacoustical transducers (Ferren discloses announcer's microphone, Column 1, line 55) located in said performance area at a corresponding plurality of spaced locations electrically coupled to respective ones of said loudspeaker arrays and located between the associated loudspeaker array and said listening area (Ferren discloses announcer in vicinity of the loudspeakers (i.e. between loudspeaker array and listening area) (Column 1, lines 51-55).

Regarding Claim 22, Ferren further discloses a room having a performance area (Figure 1) contiguous with a listening area (area 18) and a plurality of loudspeakers (arrays 10, 12, 14, and 16) with corresponding electroacoustical transducers including, placing said plurality of loudspeaker arrays at a corresponding plurality of spaced locations in said performance area with each facing said listening area (18) with the associated straight line substantially vertically oriented, placing said plurality of electroacoustical transducers in said performance area at a corresponding plurality of spaced locations between an associated loudspeaker array and said listening area, and electrically coupling each of said electroacoustical transducers to an associated loudspeaker array (Ferren discloses announcer with microphone (i.e. electrical transducer) in vicinity of loudspeaker (i.e. between loudspeaker and listening area) (Column 1, lines 51-55) which outputs sound from the microphone.

Regarding Claim 3, Ferran discloses a loudspeaker system, comprising: a first loudspeaker array comprising an enclosure having a width and a height and at least six acoustic drivers having radiating surfaces (Ferran discloses an embodiment with more than 6 speakers) (Figure 2; Column 5, lines 35-37), wherein drivers are positioned in the enclosure in a first substantially straight line, substantially regularly spaced so that the edges of radiating surfaces are less than two inches apart (Ferran discloses separation being  $\frac{1}{2}$  inch) (Column 5, lines 37-39), and array is constructed and arranged to radiate sound in a predetermined

Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 4 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

frequency range (Ferran discloses the full frequency range being coupled) (Column 2, lines 10-13), a second loudspeaker array having an enclosure and a plurality of acoustic drivers having radiating surfaces (Figure 7, array 80n), each of said drivers having an enclosure and a plurality of acoustic drivers having radiating surfaces (it is inherent acoustic drivers will have radiating surfaces), said drivers positioned in said enclosure in a second substantially straight line (Ferran discloses an embodiment with more than 6 speakers) (Figure 2; Column 5, lines 35-37), regularly spaced less than one inch apart (Ferren discloses separation being 1A inch) (Column 5, lines 37-39), wherein the second loudspeaker array is constructed and arranged to be detachably secured to said first array in a manner that extends said first substantially straight line so that the height of said loudspeaker system is increased and so that the width of said loudspeaker system remains constant (Ferren discloses arrays are secured together by conventional fastener means (i.e. detachably secured), e.g. nuts and bolts (Figures 7 and 9). Ferren does not disclose the drivers having a diameter less than three inches.

Edgar also discloses a speaker (Fig. 5A) comprising at least six drivers in a linear array. Edgar further discloses an array of ten one-inch speakers may be used in a cabinet of 11 inches (Col. 6, lines 22-33) which will inherently produce spacing less than two inches apart. Edgar further discloses there are several reasons why a small speaker size is advantageous including producing better phase linearity and smoother frequency response (Col. 4, lines 21-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use speakers less than three inches in diameter to produce better phase linearity and smoother frequency response as taught by Edgar.

Regarding Claim 4, Ferren further discloses a loudspeaker system comprising plurality of arrays (Figure 7) with a diameter of 6 inches (Column 4, lines 6-7). Ferren further discloses each array is about 12 feet high (Column 4, lines 63-64) which produces a height to width ratio of  $(12 \text{ feet} * 12 \text{ inches}) / 6 \text{ inches} = 24$  which is greater than 20. Regarding claim 5, Ferren further discloses an attachment device (nuts and bolts; Column 6, lines 25-28) for attaching said first loudspeaker array to said second loudspeaker array.

Regarding Claim 6, Ferren further discloses an electrical circuit which provides essentially the same audio signal to all of said acoustical drivers at all frequencies (Ferren discloses circuit in Figure 11 which discloses substantially the same audio signal to all of the drivers (26).

Regarding Claim 7, Ferren further discloses the individual arrays may be secured together by fastener means (i.e. may be removed and portable) (Column 6, lines 24-28)

Regarding Claim 11, Ferren discloses a first portable array module comprising a portable enclosure and at least six acoustic drivers positioned in said enclosure in a substantially straight line (Ferren discloses an embodiment with more than 6 speakers) (Figure 2; Column 5, lines 35-37); a second portable array

Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 5 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

comprising a second portable enclosure and a plurality of acoustic drivers positioned in a substantially straight line; and an attachment system for attaching said first portable array to said second portable array in a manner so as to extend said substantially straight line

(Ferren discloses individual linear arrays 80a, 80b...80n in Figure 7 where arrays may be secured together by conventional fastener means (Column 6, lines 21-28).

Regarding Claim 12, Ferren discloses a loudspeaker array module (Figure 2), comprising: a portable enclosure having an attachment system for attaching said module to a second like module (Figure 7; Column 6, lines 21-28); and at least six acoustic drivers (Ferren discloses an embodiment with more than 6 speakers) (Figure 2; Column 5, lines 35-37), each of said acoustic drivers having radiating surface (It is inherent that acoustic drivers will have a radiating surface), said at least six drivers positioned in said enclosure in a substantially straight line (Figure 2), regularly spaced so that the edges of said radiating surfaces are less than one inch apart (Ferren discloses separation being 1/4 inch) (Column 5, lines 37-39); whereby when said module is attached to said second like module all said drivers are positioned in said substantially straight line (Figure 7). Ferren does not disclose the drivers having a diameter less than three inches or a predetermined frequency range of at least six octaves.

It is well known in the art that the frequency response of the human ear is approximately 20Hz to 20KHz which is approximately 10 octaves. To produce the highest quality audio response to the ear, one skilled in the art would have known that the transducers should produce a frequency range output encompassing the greatest range between 20Hz to 20KHz possible. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a loudspeaker array would have a frequency range of at least six octaves in order to produce a high quality perceived sound for the listener.

Edgar also discloses a speaker (Fig. 5A) comprising at least six drivers in a linear array. Edgar further discloses an array of ten one-inch speakers may be used in a cabinet of 11 inches (Col. 6, lines 22-33) which will inherently produce spacing less than two inches apart. Edgar further discloses there are several reasons why a small speaker size is advantageous including producing better phase linearity and smoother frequency response (Col. 4, lines 21-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use speakers less than three inches in diameter to produce better phase linearity and smoother frequency response as taught by Edgar.

Regarding Claim 13, Ferren discloses a method for improving the number of electrical watts transduced per unit radiating area of a line array loudspeaker comprising: mounting in a substantially straight line a plurality of acoustic drivers having a radiating surface having an edge (Figure 2); and placing said acoustic

Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 6 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

drivers in said line so that the edges of radiating surfaces of adjacent acoustic drivers are separated by no greater than one inch (Ferren discloses separation being  $\frac{1}{4}$  inch) (Column 5, lines 37-39). Ferren does not disclose the drivers having a diameter less than three inches or a predetermined frequency range of at least six octaves.

It is well known in the art that the frequency response of the human ear is approximately 20Hz to 20KHz which is approximately 10 octaves. To produce the highest quality audio response to the ear, one skilled in the art would have known that the transducers should produce a frequency range output encompassing the greatest

range between 20Hz to 20KHz possible. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a loudspeaker array would have a frequency range of at least six octaves in order to produce a high quality perceived sound for the listener.

Edgar also discloses a speaker (Fig. 5A) comprising at least six drivers in a linear array. Edgar further discloses an array of ten one-inch speakers may be used in a cabinet of 11 inches (Col. 6, lines 22-33) which will inherently produce spacing less than two inches apart. Edgar further discloses there are several reasons why a small speaker size is advantageous including producing better phase linearity and smoother

frequency response (Col. 4, lines 21-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use speakers less than three inches in diameter to produce better phase linearity and smoother frequency response as taught by Edgar.

Regarding Claim 14, Ferren discloses a loudspeaker system for a live source of sound comprising (Figure 1 discloses use as a public address system): a line array loudspeaker comprising a line array plurality of acoustic drivers (Figure 2), each of the acoustic drivers positioned in an enclosure in a straight line regularly spaced less than 1

inch apart (Ferren discloses spacing between adjacent speakers being  $\frac{1}{2}$  inch) (Column 5, lines 32-52) the line array being constructed and arranged to be placed in the near vicinity of the live source of sound facing an audience (Ferren discloses announcer in vicinity of loudspeakers used in public address system such as in Figure 1) (Column 1, lines 53-54). Ferren does not disclose the drivers having a diameter less than three inches or a predetermined frequency range of at least six octaves.

It is well known in the art that the frequency response of the human ear is approximately 20Hz to 20KHz which is approximately 10 octaves. To produce the highest quality audio response to the ear, one skilled in the art would have known that the transducers should produce a frequency range output encompassing the greatest range between 20Hz to 20KHz possible. Therefore, it would have been obvious to one of ordinary skill in the art at the time the



Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 7 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

invention was made that a loudspeaker array would have a frequency range of at least six octaves in order to produce a high quality perceived sound for the listener.

Edgar also discloses a speaker (Fig. 5A) comprising at least six drivers in a linear

array. Edgar further discloses an any of ten one-inch speakers may be used in a cabinet of 11 inches (Col. 6, lines 22-33) which will inherently produce spacing less than two inches apart. Edgar further discloses there are several reasons why a small speaker size is advantageous including producing better phase linearity and smoother

frequency response (Col. 4, lines 21-37). Therefore, it would have been obvious to one

of ordinary skill in the art at the time the invention was made to use speakers less than three inches in diameter to produce better phase linearity and smoother frequency response as taught by Edgar.

Regarding Claim 15, it is well known in the art that loudspeakers are commonly used to output a wide range of audio signal content including vocalist musical performers. Ferren further discloses a sound delivery system to be used as a public address system in numerous places and situations and/or playing background music or the like which could include vocalist musical performer and presenting entity (Column 1, lines 9-12).

Regarding Claim 16, Ferren further discloses a sound delivery system to be used as a public address system in numerous places and situations and/or playing background music or the like which could include a plurality of performers (Column 1, lines 9-12) (It is also well known in the art that loudspeakers are commonly used to output a wide range of audio signal content including a plurality of performers), loudspeaker system comprising a plurality of line arrays (Figure 1; references 10, 12, 14, and 16), line arrays having a plurality of acoustic drivers (Figure 2), plurality of drivers positioned in enclosure in a straight line regularly spaced less than one inch apart (Ferren discloses spacing adjacent speakers as  $\frac{1}{2}$  inch) (Column 5, lines 37-39), each line array being constructed and arranged to be placed in the vicinity of one of said plurality of performers (Ferren discloses announcer in vicinity of loudspeaker) (Column 1, lines 53-55). Ferren does not disclose the drivers having a diameter less than three inches.

Edgar also discloses a speaker (Fig. 5A) comprising at least six drivers in a linear array. Edgar further discloses an array of ten one-inch speakers may be used in a cabinet of 11 inches (Col. 6, lines 22-33) which will inherently produce spacing less than two inches apart. Edgar further discloses there are several reasons why a small speaker size is advantageous including producing better phase linearity and smoother frequency response (Col. 4, lines 21-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 8 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

invention was made to use speakers less than three inches in diameter to produce better phase linearity and smoother frequency response as taught by Edgar.

Regarding Claim 17, as stated above apropos of claim 14 Ferren as modified makes obvious all elements of that claim. Ferren further discloses the live source as an announcer (i.e. orator) (Column 1, lines 53-57). It is also well known in the art that loudspeakers are commonly used to output a wide range of audio signal content including orators.

Regarding Claim 18, Ferren further discloses an announcer (i.e. live source) walks back and forth in front of his or her audience at time approaching any one of the arrays (i.e. announcer is between arrays and audience) (Column 3, lines 19-23). Pp. 2-13.

This ground of rejection is respectfully traversed.

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

"Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.'" *In re Laskowski*, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989).

"The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984).

"Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so." *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (emphasis in original, footnotes omitted).

Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 9 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

"The critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. [citing *Lindemann* with emphasis added.]" *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 31 (Fed. Cir. 1985).

As the Federal Circuit Court of Appeals said in *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999):

Close adherence to this methodology is especially important of less technologically complex inventions, where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.'

And in *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000), the Court said:

[I]dentification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See *id.* [*Dembiczak*]. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. See *In re Dance*, 160 F.3d 1339, 1343, 48 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 1998), *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See *B. F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582, 37 U.S.P.Q.2d 1314, 1318 (Fed. Cir. 1996).

Nothing in the references suggests the desirability of combining what is there disclosed to meet the terms of the rejected claims. The primary reference discloses six-inch drivers and radiating over the full frequency range with them. That hardly is a disclosure of using drivers of at least half that diameter.

The Edgar secondary reference discloses a speaker system for a multimedia personal computer display on a desk top for use by a single listener seated in front of the multimedia personal computer display without disturbing others nearby. By disclosing at least six small drivers in a linear array to provide "good directionality for use by a single listener seated in front of the multimedia personal computer display without disturbing others nearby," the secondary reference hardly suggest the desirability of combining what is there disclosed for use in a linear array that illuminates a large listening area. Accordingly, withdrawal of the rejection of claims



Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 10 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

as unpatentable over the primary reference in view of the secondary reference is respectfully requested.

If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the references regarded as corresponding to each limitation in each rejected claim, and quote verbatim the language in the references regarded as suggesting the desirability of combining what is there disclosed to meet the limitations of the rejected claims.

4. The office action states:

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferren in view of Edgar as applied to claim 2 above in further view of Humphrey (US Patent 4,797,633). Ferren/Edgar discloses a loudspeakers system as stated apropos of claim 2 above including power amplifiers (Ferren, Figure 6; amplifiers 62L, 64L, 62R, and

63R). Ferren does not disclose transducing at least seven watts of electrical energy per square inch of radiating surface. Edgar further discloses that the total acoustic power available from the system is proportional to the square of the total speaker surface area and it is desirable to fit as many speakers into the line as will fit. Ten one-inch speakers as stated in the rejection of claim 2 will produce a total radiating surface area of approximately  $(10 \text{ speakers} \times (0.5 \text{ inch radius})^2 \times 3.14) = 7.85 \text{ square inches}$ . Humphrey discloses a commonly designed amplifier rated at 100 watts per channel which will produce  $(100 \text{ Watts} / 7.85 \text{ inches}^2) = \text{approximately } 12.7 \text{ Watts/in}^2$  which is greater than 7 watts/int. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for a common amplifier to produce at least 7 watts of electrical energy per square inch of radiating surface. P.13.

This ground of rejection is respectfully traversed.

Claim 10 is dependent upon and includes all the limitations of claim 2 which we have shown above is patentable over the primary and secondary references so that further discussion of the Humphrey tertiary reference is submitted to be unnecessary. Furthermore, nothing in the tertiary reference remotely suggest the loudspeaker system of claim 2 constructed and arranged to transduce to acoustical energy substantially at least seven watts of electrical energy per square inch of radiating surface as called for by claim 10.

What the Examiner has been doing in rejecting claims is using the claims being rejected as a blueprint or template in an effort to read rejected on the prior art.

Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 11 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

The alleged teaching is found, not in the references but in the claims being rejected. It is error to reconstruct the claimed invention from the prior art by using the rejected claim as a "blueprint." *Interconnect Planning Corp. v. Feil*, 227 U.S.P.Q. 543, 548 (Fed. Cir. 1985).

Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious.<sup>15</sup> This court has previously stated that "[o]ne cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."<sup>16</sup> " *In re Fritch*, 23 U.S.P.Q. 2d 1780, 1784 (Fed. Cir. 1992).

If this ground of rejection is repeated, the Examiner is respectfully requested to quote verbatim the language in the tertiary reference regarded as corresponding to the limitations added by claim 10 and quote verbatim the language in the references regarded as suggesting the desirability of combining what is disclosed in the primary, secondary and tertiary references to meet the limitations of claim 10.

<sup>15</sup> *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). See also *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985).

<sup>16</sup> *In re Fine*, 837 F.2d at 1075, 5 USPQ2d at 1600.


Applicant : Henricksen et al.  
Serial No. : 09/688,525  
Filed : October 16, 2000  
Page : 12 of 12

Attorney's Docket No.: 02103-393001 / AABOSS27

In view of the forgoing authorities, remarks and the inability of the prior art, alone or in combination, to anticipate, suggest or make obvious the subject matter as a whole of the invention disclosed and claimed in this application, all the claims are submitted to be in a condition for allowance, and notice thereof is respectfully requested. Should the Examiner believe the application is not in a condition for allowance he is respectfully requested to telephone the undersigned attorney at 617-521-7014 to discuss what additional steps he believes are necessary to place the application in a condition for allowance.

Respectfully submitted,  
FISH & RICHARDSON P.C.

Date: MAR 15 2005

  
Charles Hieken  
Reg. No. 18,411  
Attorneys for Application Owner

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906

21047445.doc